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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,155	03/01/2001	Peter Hedenberg	111848	5276

466 7590 03/21/2003

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745 SOUTH 23RD STREET 2ND FLOOR  
ARLINGTON, VA 22202

EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 03/21/2003

16

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-16

# Office Action Summary

Application No.

09/647,155

Applicant(s)

HEDENBERG ET AL.

Examiner

Elizabeth M Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 14-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/13/03 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizutani, U.S. Patent NO. 5,613,960 in view of Buerger et al, U.S. Patent NO. 5,652,041. Mizutani discloses a absorbent material comprising a topsheet, , a liquid guiding fibrous sheet, an absorbent core and a backing layer. The topsheet and the liquid guiding fibrous sheet may be thermally bonded by a series of bonds. See fig. 2 and col. 2, lines 44-60. Each of the fused spots is compressed to have a high density. The fused spots may be formed as grooves which the examiner is equating with lines. The fusing is done in only a single direction so that the side of the fibrous sheet opposite the topsheet is flat. Mizutani differs from the claimed invention because Mizutani does not disclose employing circular or square bond points or that the bonds points are formed in groups wherein the point bonds in a group are closer to each other than they are to the

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bonds in another group. Buerger et al discloses a two layered material comprising a first nonwoven fabric and a second nonwoven layer formed from carded fibers. See col. 6, lines 6-8. The two layers are thermally bonded together by means of a series of point bonds. The bonds may be circular or square in shape. See col. 6, lines 49-51. The bonds may be formed in groups wherein the point bonds in a group are closer to each other than they are to the bonds in another group. See fig. 6. The shortest relative distance  $x$  between two groups of bonding sites, which two groups are situated adjacent to each other, is at least twice as great as the greatest relative distance  $y$  between two bonding sites which are arranged adjacent to each other within the groups, as shown in figure 6. It would have been obvious to have formed the bonded material of Mizutani so that it comprised a bond pattern as taught by Buerger et al. One of ordinary skill in the art would have been motivated to employ the pattern of Buerger et al because Buerger et al teaches that an intermittent bonding pattern such as that shown in figure 6 is preferred for bonding fiber layers. See col. 7, lines 38-40.

Neither Mizutani nor Buerger et al disclose the thickness of the second layer and do not disclose that the distance  $x$  is 2-6 mm and  $y$  is 0.5-1 mm, (wherein  $x$  and  $y$  are defined in claim 10). With regard to the thickness of the second layer, Buerger teaches that the staple layer provides softness, absorbency, and drapability and should have a weight of 10-80 gm/m<sup>2</sup>. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the second layer so that it had a suitable thickness within the guidelines set forth by Buerger to provide the desired softness, absorbency, drapability and had a weight within the range

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set forth in Buerger. With regard to the distance x and y, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the distance x and y in view of figure 6, and also taking into account the dimensions of the laminate in order to arrive at a laminate which had sufficient integrity and which also remained soft, absorbent and drapability. Buerger et al teaches that the amount and pattern of bonding directly affects the strength of the individual layers and of the laminate. Therefore, the amount and pattern of bonding is a result effective variable and it would have been obvious to have optimized the bonding pattern and amount. One of ordinary skill in the art would have been motivated to optimize the bonding pattern and amount by the expectation that the optimum pattern and amount of bonding would result in a strong laminate which was also strong, absorbent and drapable.

3. Applicant's arguments with respect to claims 14-25 have been considered but are moot in view of the new ground(s) of rejection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (703) 308-0037. The examiner may be reached between 6:30 AM and 5:00 PM Monday through Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (703) 308-2414.

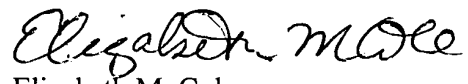
Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (703) 308-0661.

The fax number for official faxes is (703) 872-9310. The fax number for official after final faxes is (703) 872-9311. The fax number for unofficial faxes is (703) 305-5436.

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A handwritten signature in cursive script, reading "Elizabeth M. Cole". The signature is written in black ink and is positioned above the printed name.

Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c  
March 20, 2003